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Case report

Anaplastic carcinoma of the paranasal sinuses presenting as a nasal polyp

K D Pereira, P Leyden, A C M L Miller

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Nasal polyps are benign oedematous outgrowths of respiratory mucosa which frequently present to the clinician as a cause of nasal obstruction. Though nasal and sinus polyps are not true neoplasms, long-standing inflammation can lead to metaplastic changes on the surface of the mucosa, and occasionally even to carcinoma. We report a case who presented with typical findings of nasal polyposis, but was eventually found to have a malignant neoplasm of the paranasal sinuses.

CASE REPORT. A 47-year-old farmer presented to the ear, nose and throat department of another hospital with a history of increasing left-sided nasal obstruction of seven months' duration. He also suffered from intermittent epistaxis. Clinical examination revealed a smooth greyish pink polyp filling the left nasal cavity. The mass was not visible on post nasal examination. Conventional radiographic examination of the sinuses showed a soft tissue density occupying the left nasal cavity and mild haziness of the left maxillary antrum. A diagnosis of chronic maxillary sinusitis with a sinonasal polyp was made and he was placed on the waiting list for surgery.

He returned six weeks later complaining of left-sided facial pain and puffiness of his left eye. He had also noticed an enlarging swelling over the left side of his nose and face. Examination showed the polyp to have increased in size and it was now protruding through the left nostril. A smooth, tender and hard swelling had deformed the left side of the bony nasal pyramid and had obliterated the left nasofacial fold. The mass was still not visible on post nasal examination. CT scanning of the sinonasal complex showed a lobulated soft tissue mass filling the left nasal cavity and ethmoid labyrinth and involving the medial walls of the left maxilla and orbit.

Under a general anaesthetic the tumour was partially removed intranasally and a left intranasal ethmoidectomy performed, but curative surgery was not attempted. The tumour had eroded the medial wall of the maxilla, creating a

Ear, Nose and Throat Department, Belfast City Hospital, Belfast BT9 7AB.

K D Pereira, MS, Senior House Officer.

P Leyden, MB, BCh, Senior House Officer.

A C M L Miller, FRCS, Consultant Surgeon.

Correspondence to Dr K D Pereira.

natural antrostomy. Bleeding was controlled by a Brighton balloon and gauze packs, which were removed on the third day. He was referred for radiotherapy.

DISCUSSION

Badib et al[1] and Batsakis[2] state that nasal and paranasal carcinoma presents as chronic sinusitis or nasal polyps in approximately 15% of cases. Busuttil[3] in a study of 1720 patients with nasal polyps reported carcinoma *in situ* in 1·8% of cases, while Mera[4] in a ten year study of nasal and sinus polyps found frank carcinoma in 1·2%. These findings suggest a relationship between carcinoma of the nose and paranasal sinuses and chronic sinusitis and nasal polyps.

Among the epithelial neoplasms of the nose and paranasal sinuses, inverted papillomas are usually associated with a high recurrence rate, and occasionally with malignant transformation. Nasal polyps are considered to be benign mucosal outgrowths, and reports of their conversion to an invasive carcinoma are very infrequent. Maran and Stell[5] are of the opinion that malignant degeneration of true sino-nasal polyps does not occur but polyps can arise secondary to malignant disease in the nose and paranasal sinuses.

Hasegawa et al[6] described a case of a 49 year old man who presented with a long-standing history of nasal obstruction and a huge polyp in the right nostril. Though CT scanning showed changes consistent with chronic sinusitis and polyposis, histopathological examination of the excised polyp revealed an invasive carcinoma. Initially, conventional radiographs in our patient also suggested chronic sinusitis, though CT scanning a short time later demonstrated an invasive tumour, with bone destruction. Normal sinus radiographs cannot definitely exclude malignancy.

Batsakis[2] feels that though nasal and sinus polyps are not true neoplasms, long-standing inflammation can lead to metaplastic changes on the mucosal surface and eventually to dysplasia and carcinoma *in situ.* Smith et al[7] and Klenhoff and Goodman[8] have reported atypical mesenchymal cells in inflammatory nasal and sinus polyps. Mera[4] cites Barnes as suggesting that the findings of stromal atypia, epithelial aberrations or granulomata may hint at a tendency towards malignant degeneration.

There are many who recommend histological examination of all surgically excised polyps. When one considers that 10–20 polyps may be removed from one patient, this would create a heavy work load for the laboratory. All solitary or suspicious polyps should be submitted for histology, which may help to identify epithelial changes at an early stage and possibly demonstrate the true incidence of malignant transformation.

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